

Docket: 004544 ALRT/FISH/DICP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Application No.: Chang-Lin Hsieh et al. 10/016.562

Date Filed:

12/12/01

Title:

PROCESS FOR SELECTIVELY ETCHING DIELECTRIC LAYERS

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted

herewit	h for con	sideration by the United S	states Patent and Tra	demark Office.
1 .	COPIE a.	A legible copy of (i) ear which caused it to be list to be listed, is included h	ited; and (iii) all oth nerewith.	patents: (ii) each publication or that portion er information or that portion which caused
	b. 🗌	not enclosed herewith v	vere previously cite	ion which are listed on PTO/SB/08 which are id by or submitted to the PTO in one of the ied upon for an earlier filing date under 3.
		U.S. Serial Number		U.S. Filing Date
II. HH. 🗍	a. \(\sum \) b. \(\sum \) c. \(\sum \) CROSS The Exthat ma	other information are in A concise explanation of listed that is not in the Ei The following additional S REFERENCE TO RELA caminer is advised that the ay be related to the present the second of the present that the present tha	ted below in (b) of the English language of the relevance of nglish language is a l information is pro- TED APPLICATION the following co-per- sent application.	this section, all of the patents, publications of e (concise explanation not required). all patents, publications or other informations is follows: vided for the Examiner's consideration;
	Serial N	No.	Filing Date	Art Unit
			<u>fees</u>	
ıv 🗀	THIS I	DS IS BEING FILED UNI	DER 37 C. F.R. 81 9	17(h): (check one box)

IV. 🔲	THIS	<u>OS IS BEING FILED UNDER 37 C.F.</u>	<u>R. §1.97(b)</u> : (ch	eck one box)		
	a. 🔲	within three months of the filing day	te of a nationa	application	other than	a continued
		prosecution application under § 1.53 required.	(d) (37 C.F.R.	§1.97(b)(1)).	No fee or	statement is

Docket: 004544 ALRT/ET DICP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Application No.: Chang-Lin Hsieh et al. 10/016.562

Date Filed:

12/12/01

Title:

PROCESS FOR SELECTIVELY ETCHING DIELECTRIC LAYERS

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

accordance with 37 CFR \$1.56 and in compliance with 37 C.F.R. \$\$1.97 and 1.98, the

	es listed	on attached Form PTO/SF	3:08 and/or subsequently identified ates Patent and Trademark Office.	
I.	<u>COPIES</u> a.⊠	A legible copy of (i) each	n U.S. and foreign patents; (ii) eaced; and (iii) all other information of the country.	
	b	not enclosed herewith we	or other information which are lisere previously cited by or submitted hich has been relied upon for an	ed to the PTO in one of the
		U.S. Serial Number		U.S. Filing Date
II.	CONCI a. ⊠ b. □	Except as may be indicate other information are in the	HE RELEVANCE (check at least of the below in (b) of this section, all of the English language (concise explain the relevance of all patents, publications)	of the patents, publications or nation not required).
	c. 🗌	listed that is not in the En	glish language is as follows: information is provided for the Exa	
III 🗌	The Exthat ma	y be related to the prese	FED APPLICATION(S) following co-pending application and application. By bringing this does(do) not waive the confident	s (these) applications to the
	Serial N	<u>lo.</u>	Filing Date	Art Unit
			<u>FEES</u>	
IV 🗌	THIS II	within three months of the	DER 37 C.F.R. §1.97(b): (check one filing date of a national application of the filing date of the national application of the filing date of the	cation other than a continued

Docket: 004544 ALRT/E H/DICP b. 🔲 within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required. c. 🔲 before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required. d. 🔲 before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required. v. 🔯 THIS IDS IS BEING FILED UNDER 37 C.F.R. \$1.97(c): (check one box) before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)). No statement; therefore, charge deposit account 50-1047 the fee set forth in 37 C.F.R. §1.17(p). b. 🔀 See the statement below. No fee is required. VI. THIS IDS IS BEING FILED UNDER 37 C.F.R. \$1.97(d): on or before payment of the issue fee and is accompanied by the following: a statement under 37 C.F.R. §1.97(e) as provided below; and 1) 2) charge deposit account 50-1047 the petition fee set forth in §1.17(p). VII. X STATEMENT UNDER 37 C.F.R. \$1.97(e) (check only one box, if applicable) The undersigned hereby states that Each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or b. 🔲 No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or c. Some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. VIII. PAYMENT OF FEES

It is Applicant(s)' opinion that the claims presently on file patently distinguish the present invention from each of these references. The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

Please charge Deposit Account No. 50-1047 in the amount of \$180.00 for the above-

If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 50-1047.

Two Copies of this paper are attached for Deposit Account charges and debits.

is enclosed for the above-identified fee(s).

A check in the amount of ___

indicated fee(s).

Docket: 004544 ALRT/B H/DICP

If the Examiner has any questions concerning this IDS, heishe is requested to contact the undersigned. It it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a potition if necessary) and charge the appropriate fee to Deposit Account No. 50-1047.

Respectfully submitted,

David B. Bonham

Attorney for Applicant(s) Reg. No. 34,297 Tel. 703-433-0510

Fax: 703-433-2362

MAYER FORTKORT & WILLIAMS Customer Number 27774

Enclosures:

.

PTO/SB/08

References Foreign Search Report

Other:

Certificate of Mailing by First Class Mail

I certify that this document and fee is being deposited with sufficient postage with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 on

MAY 13, 2005

and is addressed to Mail Stop DD, Commissioner for Patents,

P.O. Box 1450, Alexandria, VA 22313-1450.

Signature of Person Mailing Correspondence

Marjorie Scariati

Typed or Printed Name of Person Mailing Certificate

Docket No.: 004544 ALRI/ETCH/DICP

Please type a plus sign (+) inside this box FORM PTO/SB/08

	Substitu	le für form	1449A/PTO		Complete if Known		
	1				Application Number	10/016,562	
] INFO	RMATI	ON DISCLOSURE		Filing Date	12/12/01	
PE 10/8	STAT	EMENT	BY APPLICANT		First Named Inventor	Chang-Lin Hsieh et al	
					Group Art Unit	1765	
C and	1 tuse as m	umi sheets	as necessary;		Examiner Name	Unassigned Dilo	
5 2003	Sheet		l of	11	Attorney Docket Number	004544 ALRT/ETCH/DICP	
MAY	27						
ં	Examiner	Cite	U.S. Patent De	ocument	Name of Patentee or Applicant	Date of Publication of Cited Document MM-	
TENT & TRACE	Initials*	No	Number	Class/Subclass (if known)	of Cited Document	DD-AAAA.	
	45	1	2002/0061654 A1	438/710	Kanegae et al.	5/23/2002	

Examiner	Cite			Name of Patentee or Applicant	Date of Publication of Cited Document MM-
mmais	No			of Cited Document	DU-YYYY
75	1	2002/0061654 A1	438/710	Kanegae et al.	5/23/2002
	2.	6.251,770 B1	438/624	Uglow et al.	6/26/2001
90	3.	6,228,758 B1	438/624	Pellerin et al.	5/8/2001
	 	-			
	┼	-	+		
	 		 		
	1		1	ł	

Examiner	Cite			ncument	Name of Patentee or Applicant of	Date of Publication	T
Initials*	. Yo.			Class/Subclass (if known)	Cited Document	of Cited Document MM-DD-YYYY	
	1.	JP	2001210627	H01L 21/3065	Matsushita Electric Ind. Co. Ltd.	08/03/2001	
9,5	2.	EP	1 085 563 A2	H01L 21/311	Motorola, Inc.	09/11/2000	
الرابا	3.	EP	1 059 664 A2	H01L 21/312	Applied Materials, Inc.	06/08/2000	
على الخ	4.	EP	0 805 485 A2	H01L 21/311	Applied Materials, Inc.	04/17/1997	
j v	5.	WO	02/19408 A2	H01L 21/311	Applied Materials, Inc.	03/07/2002	
	L	ļ					
1	1	1	1	Ī	1	1	1

Examiner [Λ, Α	Date	~ /	
1 Administra	V.6		9/9	<i>i</i> 3 - 2
Signature			7122	/ U 3
Signature		Considered		

EXAMINER Initial if reference considered, whether or not obtation is it conformance with MPEP 809. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. ² See Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁵ Applicant is to place a check mark here if English Language Translation is attached.

Docket No.: 004544 ALRI/ETCH/DICP

of

QE JOIS

Please type a plus sign (+) inside this box FORM PTO/SB/08 Substitute for form 1449/VPTO Complete if Known Application Number 10/016,562 INFORMATION DISCLOSURE 12/12/01 Filing Date STATEMENT BY APPLICANT First Named Inventor Chang-Lin Hsieh et al Group Art Unu tuse as many sheets as necessary; Linassigned Dillo Examiner Name Sheet Attorney Docket Number

004544 ALRTETCH/DICP

Examiner	Cite	U.S. Patent Do	cument	Name of Patentoe or Applicant	Date of Publication of Cited Document MM-
Initials*	No	Number	Class Subclass (if known)	of Cited Document	DD-YYYY
90	1	2002/0061654 A1	438/710	Kanegae et al.	5/23/2002
	2.	6,251,770 B1	438/624	Uglow et al.	6/26/2001
90	3.	6,228,758 B1	438/624	Pellerin et al.	5/8/2001
			<u> </u>		
	L		1		
			1		
			1		
		<u> </u>	1		
			1		
			<u> </u>		
L	i		į.	Ť	<u> </u>

Examiner	Cite			Name of Patentee or Applicant of	Date of Publication	T	
Initials*	No.	Office	Number ²	Class/Subclass (if known)	Cited Document	of Cited Document MM-DD-YYYY	
	1.	JP	2001210627	H01L 21/3065	Matsushita Electric Ind. Co. Ltd.	08/03/2001	
90	2.	EP	1 085 563 A2	H01L 21/311	Motorola, Inc.	09/11/2000	
37	3.	EP	1 059 664 A2	H01L 21/312	Applied Materials, Inc.	06/08/2000	
ال الح	4.	EP	0 805 485 A2	H01L 21/311	Applied Materials, Inc.	04/17/1997	1
do	5.	WO	02/19408 A2	H01L 21/311	Applied Materials, Inc.	03/07/2002	
	-	 	 			+	1

						_
F.	xaminer	0.0	Date	9	1/00103	
S	ignature	PU	Considered	7	7 22/03	_

EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. ² See Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

Application Number Docket Number (Optional) 004544 ALRT/ETCH/DICP INFORMATION DISCLOSURE CITATION Applicant(s) Chang-Lin Hsieh et al. (Use several sheets if necessary) Filing Date Group Art Unit Unassigned 1765 Filed Herewith U.S. PATENT DOCUMENTS EXAMINER FILING DATE REF DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE 20 5,445,710 8/29/95 Hori et al. 438 717 5,935,874 8/10/99 438 Kennard 710 6,054,379 4/25/00 Yau et al. 438 623 6,071,809 6/6/00 Zhao 438 634 6,072,227 6/6/00 Yau et al. 257 642 6,097,095 8/1/00 774 Chung 257 6,165,891 12/26/00 Chooi et al. 438 622 1/2/01 6,168,726 Li et al. 79 216 6,180,533 1/30/01 Jain et al. 438 714 10 6,207,583 3/27/01 725 Dunne et al. 438 V. 6,211,092 4/3/01 Tang et al. 438 719 FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED 9/22/03 EXAMINER: Initial if citation c usidered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of his form with next communication to applicant,

					Docket Number (Optional) 004544 ALRT/ETCF		Application Number Ung	10/0/6162
	INFO	DRMATION DISCLOSUR			Applicant(s) Chang-Lin Hsieh et al.		, , , , , , , , , , , , , , , , , , , ,	
		·			Filing Date Filed Herewith Group Art Unit Unassigned (spigned 1765
				U.S. PAT	ENT DOCUMENTS			7.8
'EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Sel	1	5,445,710	8/29/95	Hori et	al.	438	717	0
	2	5,935,874	8/10/99	Kennar	d	438	710	62 1
	3	6,054,379	4/25/00	Yau et a	al.	438	623	016
	4	6,071,809	6/6/00	Zhao		438	634	120 Et
	5	6,072,227	6/6/00	Yau et a	ıl.	257	642	
	6	6,097,095	8/1/00	Chung		257	774	
	7	6,165,891	12/26/00	Chooi e	t al.	438	622	
	8	6,168,726	1/2/01	Li et al.		216	79	
	9	6,180,533	1/30/01	Jain et a	ıl.	438	714	
1	10	6,207,583	3/27/01	Dunne et al.		438	725	
Sh.	11	6,211,092	4/3/01	Tang et al.		438	719	
				FOREIG!	N PATENT DOCUMENTS			
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Translation YES NO
					-			

\	7			OTHER D	OCUMENTS (Including A	uthor, Title, L	Oate, Pertinent Pa	ges, Etc.)
	-							
		}						
EXAMINER	L	2l			DATE CONSIDERED	9/22	2/03	
		il if citation c usidered, whether linde copy of . iis form with next			e with MPEP Section 609; Dr			in conformance and
Form PTO-	A820			P09A/	REV04 Past	ent and Tradema	ark Office * U.S. DEP/	ARTMENT OF COMMERCE

Form PTO-A820